

**A NEW SUBSPECIES, REPLACEMENT NAMES, AND SPELLING
FIXATIONS FOR SPECIES OF DELTOCEPHALINAE AND MACROPSINAE
(HEMIPTERA: CICADELLIDAE)**

S. H. MCKAMEY AND A. L. HICKS

(SHM) Systematic Entomology Laboratory, PSI, Agricultural Research Service, U.S. Department of Agriculture, c/o National Museum of Natural History, Smithsonian Institution, P.O. Box 37012, MRC 168, Washington, DC 20013-7012 (e-mail: stuart.mckamey@ars.usda.gov); (ALH) University of Colorado Museum, Henderson Building, Campus Box 218, Boulder, CO 80309-0218 (e-mail: andrew.hicks@colorado.edu)

Abstract.—Nomenclatural and taxonomic changes are made to align the classification of Deltocephalinae with the International Code of Zoological Nomenclature. The **new subspecies**, *Tetartostylus parabolatus spinus*, is described, *Balclutha frontalis* Ferrari is reinstated as valid, and nine **replacement names** are given: *Balclutha flavidella*, *Cephalius villiersi*, *Exitianus evansi*, *Hecalus chilensis*, *Macropsis ishiharai*, *Scaphytopius delongi*, *Scaphytopius (Cloanthanus) linnavuorii*, *Sorhoanus lii*, and *Thamnotettix matsumurai*. Additionally, the principle of first revisor is applied to fix the correct spellings of 13 species spelled multiple ways within their original descriptions.

Key Words: Membracoidea, leafhopper, new names, subspecies, nomenclature

Inconsistency often becomes apparent when one brings together many disparately published species into a single classification. Although no single classification is likely to please all researchers, due to inherent subjectivity, all names used in classifications must meet the requirements of the International Rules of Zoological Nomenclature (ICZN; International Commission on Zoological Nomenclature 1999). While preparing the Leafhoppers of the World Database (LOWD), we discovered many changes needed purely on nomenclatural grounds.

Necessary replacement names for pre-occupied leafhopper genera already were provided recently, along with consequent new species combinations (Seven 1997; McKamey 2003, 2006; Dmitriev and Dietrich 2006). The first paper dealing

with purely species-level changes uncovered while compiling LOWD dealt with the subfamily Cicadellinae (McKamey 2006). This paper, the second installment, is on the Deltocephalinae and Macropsinae.

The limits of Macropsinae are not in dispute. The limits of Deltocephalinae, however, have been variably defined (Metcalf 1967a, b; Hamilton 1975; Oman et al. 1990) to sometimes include several taxa that are otherwise treated as separate subfamilies, such as the Aphrodinae. Even in the most restricted sense, as applied here, Deltocephalinae is the largest subfamily of leafhoppers, containing about 5,400 species. They are cosmopolitan and many are known to transmit phytopathogens, such as reoviruses and rhabdoviruses (Conti 1985).

No nomenclatural problems have been discovered in Aphrodinae, Arrugadinae, Acostemminae, Drakensbergeniinae, Eupelicinae, Koebeliinae, Mukariinae, Paraboloponinae, Penthimiinae, or Selenocephalinae, which are taxa considered to be closely related to Deltocephalinae in recent phylogenetic analyses (C. Dietrich and J. Zahniser, unpublished).

References before 1986 have key letters consistent with the bibliographies by Metcalf (1964a) and Oman et al. (1990).

MACROPSINAE

Macropsis ishiharai McKamey and Hicks, new name

Macropsis ishiharai, *nomen novum* for *Macropsis orientalis* Ishihara 1961a: 238, preoccupied by *Macropsis (Macropsis) orientalis* (Distant 1916a: 239).

Both species are valid and without synonyms. *Macropsis orientalis* (Distant) was described from India and *M. orientalis* Ishihara was described from Thailand. The new name is dedicated to the author of the junior homonym for his contributions to Auchenorrhyncha taxonomy.

DELTOCEPHALINAE

Tetartostylus parabolatus spinus McKamey and Hicks, new subspecies

Tetartostylus parabolatus spinus, new subspecies here described by bibliographic reference: *Tetartostylus parabolatus* var. *spinus* Linnavuori 1961a: 483 [n. var.].

Distribution: South Africa [type depository not stated in original description].

Note: Linnavuori's use of "var." was in the sense of a subspecies; he designated a name-bearing type ("...a male (type) (Loc. No. 251).") for the taxon.

Placotettix taeniatifrons "var." *meridionalis* Metcalf, unavailable

Like the former subspecies, Metcalf (1967a: 386) named *Placotettix taeniatifrons* "var." *meridionalis*, not as a new subspecies but as a *nomen novum* for *Thamnotettix aliena* Fieber (1885a). Note that a new subspecies is not required to be described for it because the preoccupied name, *T. aliena*, was placed as a junior synonym of *Placotettix taeniatifrons* (Kirschbaum 1868b: 89) by Nast (1972a: 353).

frons "var." *meridionalis*, not as a new subspecies but as a *nomen novum* for *Thamnotettix aliena* Fieber (1885a). Note that a new subspecies is not required to be described for it because the preoccupied name, *T. aliena*, was placed as a junior synonym of *Placotettix taeniatifrons* (Kirschbaum 1868b: 89) by Nast (1972a: 353).

Balclutha flavidella McKamey and Hicks, new name

Balclutha flavidella, *nomen novum* for *Eugnathodus lineatus* Osborn 1924c: 449, preoccupied by *Gnathodus lineatus* Melichar 1903b: 208.

Eugnathodus flavidus Osborn 1926c: 351, preoccupied by *Eugnathodus flavidus* Naudé 1926a: 88.

Balclutha lineata (Melichar 1903b: 208) was a valid name until placed in synonymy under *Balclutha rosea* (Scott 1876d: 83) by Knight (1987a: 1208) but see below. A secondary junior homonym, *Balclutha lineata* (Osborn 1924c), was formed when Linnavuori (1959b: 340) referred the species from the genus *Nesosteles* to *Balclutha*, and up to now was still in use as a valid name, but has not been used by at least 10 authors. *Balclutha lineata* (Osborn 1924c) has one junior synonym: *Eugnathodus flavidus* Osborn (1926c). *Eugnathodus flavidus* Osborn is a junior primary homonym of *E. flavidus* Naudé (1926a: 88), which was valid until 1973 (most recently, Knight (1987a: 1206) placed it as a junior synonym of *Balclutha incisa* (Matsumura 1902a)).

Balclutha lineata (Osborn) fails to meet the prevailing usage requirements (ICZN Art. 23.9.1) and lacks a valid synonym. It therefore requires a *nomen novum*. *Eugnathodus flavidus* Osborn does not require a replacement name because it has a valid synonym, namely, the *nomen novum* given above for *B. lineata* (Osborn).

The new name was chosen to retain the meaning (*flavus*: Latin for yellowish) of the junior homonym.

***Balclutha frontalis* Ferrari,
reinstated as valid**

Gnathodus roseus Scott 1876d: 83. Knight 1987a: 1208 [implicit reinst. as *Balclutha rosea*] Preoccupied by *Typhlocyba rosea* Provancher (1872c), which is a junior synonym of *Balclutha punctata* (Fabricius 1775a).

Gnathodus frontalis Ferrari 1882a: 117. Knight 1987a: 1208 [implicit reinst. syn. under *Balclutha rosea* (Scott)].

Gnathodus lineatus Melichar 1903b: 208. Knight 1987a: 1208 [n. syn.].

Nesosteles hebe Kirkaldy 1906c: 343. Knight 1987a: 1208 [n. syn.].

Nesosteles dryas Kirkaldy 1907d: 65. Knight 1987a: 1209 [n. syn.].

Gnathodus pallidulus Matsumura 1908a: 11. Knight 1987a: 1209 [implicit n. syn.].

Balclutha montana Melichar 1914b: 138. To *Balclutha rosea* (Scott); Knight 1987a: 1209 [n. syn.].

Balclutha orientalis Matsumura 1914a: 169. To *Balclutha rosea* (Scott); Knight 1987a: 1209 [implicit n. syn.].

Cicadula longiforma Cogan 1916a: 196. Theron 1970b: 322 (cited by Knight 1987a: 1209).

Eugnathodus guajanae DeLong 1923 [in Wolcott 1923b: 267]. Knight 1987a: 1209 [implicit reinst. syn.].

Balclutha flava Haupt 1927a: 37. Linnavuori 1962a: 39 [n. syn.].

Eugnathodus calcara DeLong and Davidson 1933a: 57. Knight 1987a: 1209 [implicit reinst. syn.].

Agellus philippinensis Merino 1936a: 382. Knight 1987a: 1209 [n. syn.].

Balclutha pulchella Lindberg 1948b: 141. Linnavuori 1959b: 339 [n. syn.].

Balclutha haupti Metcalf 1955a: 266 [nom. nov. for *Balclutha flava* Haupt 1927a]. To *Balclutha rosea* (Scott); Knight 1987a: 1209 [listed as syn.].

Balclutha rosea (Scott) was treated as valid by Linnavuori (1959b: 339, 1960a: 339, 1960b: 60), Metcalf (1967c: 2434), Knight (1987a: 1208) [who revised the genus], Webb and Vilbaste (1994a: 57), and Dai et al. (2004a: 750). Linnavuori (1975c: 631) and Giustina (1989a: 92), however, listed it as a synonym of *Balclutha frontalis*. The senior homonym of *Balclutha rosea* (Scott), namely *Typhlocyba rosea* Provancher (1872c: 378), is a junior synonym of *Balclutha punctata* (Fabricius 1775a: 687) (Baker 1896a; Metcalf 1967c).

***Cephalius villiersi* McKamey and Hicks,
new name**

Cephalius villiersi, nomen novum for *Cephalius chobauti* Villiers 1956a: 835, preoccupied by *Cephalius chobauti* Puton (1898a: 173).

Both species are valid without synonyms. *Cephalius chobauti* Puton was described from Algeria and *C. chobauti* Villiers from Mauritania. The new name is based on the author of the junior homonym.

***Exitianus evansi* McKamey and Hicks,
new name**

Exitianus evansi, nomen novum for *Eutettix pallida* Evans 1938b: 14, preoccupied by *Eutettix pallidus* Osborn (1926c: 348).

The senior homonym, whose valid name is now *Euscelis pallidus* Osborn (1926c: 348), is recorded from Cuba and the United States. It was a valid species of *Exitianus* until Linnavuori (1959b: 315) placed it in synonymy under *Exitianus exitiosa* (Uhler 1880a: 72).

The junior homonym, *Eutettix pallida* Evans, was referred to *Exitianus* by Evans (1966a: 228). Ross (1968a), in his revision of Old World *Exitianus*, included *Eutettix pallida* Evans in *Exitianus*, having been described from female

types, and suggested that it might prove to be a junior synonym of *E. plebeius* (Kirkaldy 1906c: 331). Fletcher and Larivière (2001) indicated that *E. pallidus* "is not a true *Exitianus*." At present, however, the species is treated as valid in *Exitianus*, and therefore requires a new replacement name.

The new name is based on the author of the junior homonym.

***Hecalus chilensis* McKamey and Hicks,
new name**

Hecalus chilensis, *nomen novum* for *Hecalus australis* Linnavuori and DeLong 1977c: 183, preoccupied by *H. australis* (Evans 1941e).

Both species are valid without synonyms. *Hecalus australis* Linnavuori and DeLong was described from Chile and *H. australis* Evans was described from Australia.

The homonymy arose through a series of events: *Parabolocratus australis* Evans was moved to his new genus *Linnavuoriella* (Evans 1966a: 135). *Linnavuoriella* was synonymized under *Hecalus* by Morrison (1973a) who did not list the species. Linnavuori (1975a) treated *Linnavuoriella* as a valid genus, but he did not cite Morrison's (1973a) paper, suggesting that Linnavuori was unaware of the change. The new combination *Hecalus australis* (Evans) was first published by Day and Fletcher (1994a: 1215).

The new name is based on the species' country of origin.

***Scaphytopius delongi* McKamey and
Hicks, new name**

Scaphytopius delongi, *nomen novum* for *Hebenarus abruptus* DeLong 1944c: 44, preoccupied by *Scaphytopius* (*Convelinus*) *abruptus* Ball 1909c: 165.

Van Duzee (1910a: 230) placed the senior homonym as a junior synonym of *Scaphytopius* (*Convelinus*) *fuscifrons*

(Van Duzee 1894f: 206), which occurs in the United States. Oman (1949a: 101) synonymized *Hebenarus* under *Scaphytopius*, which resulted in the homonymy, but did not list the senior homonym. The *nomen novum* for the junior homonym denotes a valid species described from Mexico.

The new name is based on the author of the junior homonym.

***Scaphytopius* (*Cloanthanus*) *linnavuorii*
McKamey and Hicks, new name**

Scaphytopius (*Cloanthanus*) *linnavuorii*, *nomen novum* for *Scaphytopius* (*Cloanthanus*) *divisus* DeLong and Linnavuori 1978b: 116, preoccupied by *Scaphytopius divisus* (DeLong 1944a: 171).

Both species are valid without synonyms. *Scaphytopius divisus* (DeLong 1944a) was described from Mexico and *Scaphytopius divisus* DeLong and Linnavuori (1978b) was described from Peru. The new name is based on one author of the junior homonym.

***Sorhoanus lii* McKamey and Hicks,
new name**

Sorhoanus lii, *nomen novum* for *Sorhoanus binotatus* Li and Dai 2003a: 10, preoccupied by *Sorhoanus binotatus* Kuoh 1985b: 87.

Both species are valid without synonyms. *Sorhoanus binotatus* Kuoh was described from China and *S. binotatus* Li and Dai was described from Taiwan. The new name is based on the author of the junior homonym.

***Thamnotettix matsumurai* McKamey and
Hicks, new name**

Thamnotettix matsumurai, *nomen novum* for *Thamnotettix infuscatus* Matsumura 1911b: 28, preoccupied by *Thamnotettix infuscatus* Gillette and Baker 1895a: 98.

The senior homonym *Thamnotettix infuscatus* Gillette and Baker is a junior synonym of *T. confinis* Zetterstedt (1828a: 527), which has a widespread distribution: United States, Canada, Europe (Scandinavia to western Mediterranean), northern Africa, Russia, eastern Baltic States (Metcalf 1967a), and Mongolia (Dlabola 1965c). *Thamnotettix infuscatus* Matsumura, a valid species without synonyms, was described from Russia.

The new name is based on the author of the junior homonym.

FIXED CORRECT ORIGINAL SPELLINGS

The principle of first reviser (ICZN Art. 24) is here applied to fix the spellings of 13 species that were spelled multiple ways in their original descriptions. All are valid species without synonyms.

Acinopterus igualanus Linnavuori and DeLong 1977d: 252. The spelling “*igualanum*” (in Abstract) is deemed incorrect.

Acinopterus peridicoensis Linnavuori and DeLong 1977d: 250. The spelling “*peridicoensis*” (p. 250) is deemed incorrect.

Allygus (Syringius) rebellatrix Dlabola 1995a: 317. The spelling “*rebelatrix*” (p. 318) is deemed incorrect.

Amplicephalus latus DeLong 1984d: 169. The spelling “*lastus*” (p. 171) is deemed incorrect.

Angubahita atra DeLong 1982a: 185. The spelling “*arta*” in the species heading is deemed incorrect.

Bendara lyrata DeLong 1980h: 64. The spelling “*lyarata*” [in note, p. 64] is deemed incorrect.

Deltocephalus diagnalis DeLong 1984f: 110. The spelling “*diagnalus*” in the species heading is deemed incorrect.

Haldorus nigrifrons Linnavuori and DeLong 1979a: 51. The spelling “*nigifrons*” (p. 51) is deemed incorrect.

Macrosteles purpurea Kuoh [in Kuoh and Lu 1986a: 121]. The spelling “*purpureta*” (p. 121) is deemed incorrect.

Neurotettix flangenus Shen and Dai (2002: 89) appears as such in the abstract, the introduction, at the head of the species description and in the Chinese summary (and is therefore presumed to be the intended name). It is misspelled as *N. robustus* (presumably a *lapsus calami*) in the key and in the figure caption.

Paratanus bipunctus DeLong and Cwikla 1985a: 725. The spelling “*bipunctatus*” in the abstract is deemed incorrect.

Perubahita longifalx Linnavuori and DeLong 1978b: 114. The spelling “*longifal*” (p. 114) is deemed incorrect.

Scaphoideus wideaedeagus Wang and Li 2004a: 17. The spelling “*windeaedeagus*” in English summary (p. 18) is deemed incorrect.

ACKNOWLEDGMENTS

We thank the many researchers of Membracoidea who have encouraged the LOWD project since its beginning, and to F. C. Thompson, L. Deitz and two anonymous reviewers for suggestions on earlier drafts of this manuscript.

LITERATURE CITED

- Baker, C. F. 1896a. The North American species of *Gnathodus*. Canadian Entomologist 28: 35–42.
- Ball, E. D. 1909c. Several new western jassids. Entomological News 20: 163–168.
- Cogan, E. S. 1916a. Homopterous studies. Part 1. Contribution towards our knowledge of the Homoptera of South Africa. Ohio Journal of Science 16: 161–208.
- Conti, M. 1985. Transmission of plant viruses by leafhoppers and planthoppers, pp. 289–307. In Nault, L. R. and J. G. Rodriguez, eds. The Leafhoppers and Planthoppers. Wiley and Sons, New York.
- Dai, R.-H., Z. Z. Li, and X. X. Chen. 2004a. Notes on Chinese species of *Balclutha* with descriptions of three new species (Homoptera, Cicadellidae, Euscelinae). Acta Zootaxonomica Sinica 29(4): 749–755.

- Day, M. F. and M. J. Fletcher. 1994a. An annotated catalogue of the Australian Cicadelloidea (Hemiptera: Auchenorrhyncha). *Invertebrate Taxonomy* 8: 1117–1288.
- DeLong, D. M. 1944a. A new genus (*Tumeus*) and six new species of leafhoppers closely related to *Cloanthanus* (Homoptera, Cicadellidae). *Bulletin of the Brooklyn Entomological Society* 38: 168–174.
- . 1944c. A new genus—*Hebenarus*—and thirteen new species of leafhoppers closely related to *Cloanthanus* (Homoptera, Cicadellidae). *Pan-Pacific Entomologist* 20: 41–53.
- . 1980h. New genera and species of Mexican and South American deltocephaline leafhoppers (Homoptera, Cicadellidae, Deltocephalinae). *Revista Peruana de Entomologia* 23(1): 63–71.
- . 1982a. New Central and South American leafhoppers of the “*Bahita*” group (Homoptera: Cicadellidae: Deltocephalinae). *Proceedings of the Entomological Society of Washington* 84(1): 184–190.
- . 1984d. Some new species of Bolivian *Amplicephalus* (Homoptera: Cicadellidae: Deltocephalinae). *Uttar Pradesh Journal of Zoology* 4(2): 168–174.
- . 1984f. New species of Central American *Polyamia* and *Deltocephalus* (Homoptera: Cicadellidae: Deltocephalinae). *Brenesia* 22: 107–114.
- DeLong, D. M. and P. S. Cwikla. 1985a [1984]. New Neotropical Deltocephalinae (Homoptera: Cicadellidae). *Journal of the Kansas Entomological Society* 57(4): 725–728.
- DeLong, D. M. and R. H. Davidson. 1933a. Some new species of *Eugnathodus* (Homoptera, Cicadellidae). *Ohio Journal of Science* 33: 55–58.
- DeLong, D. M. and R. Linnavuori. 1978b. Studies of Neotropical leafhoppers (Homoptera: Cicadellidae). *Entomologica Scandinavica* 9: 111–123.
- Distant, W. L. 1916a. Rhynchota, Homoptera. Appendix. The Fauna of British India, Including Ceylon and Burma. Published under the authority of the Secretary of State for India Council 6: pp. i–vii, pp. 1–248, Taylor and Francis, Bombay, India
- Dlabola, J. 1965c. Ergebnisse der Zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. 54. Homoptera—Auchenorrhyncha. *Sbornik Faunistických Práci Entomologického Odelni Narodního Musea V Praze* 11(100): 79–136.
- . 1995a. *Mycterodus* verwandte Taxone und sieben neue Zikadenarten (Homoptera, Auchenorrhyncha). [Taxa related to *Mycterodus* and seven new cicada species (Homoptera, Auchenorrhyncha).] *Acta Entomologica Nationalis Prague* 44: 301–319.
- Dmitriev, D. A. and C. H. Dietrich. 2006. Nomenclatural changes and notes in the tribe Erythroneurini (Homoptera: Cicadellidae: Typhlocybinae). *Zootaxa* 1120: 35–39.
- Evans, J. W. 1938b. Australian leafhoppers (Homoptera, Jassoidea). Part VIII. Royal Society of Tasmania Papers and Proceedings 1938: 1–18.
- . 1941e. New Australian leafhoppers. Royal Society of South Australia Transactions 65: 36–41.
- . 1966a. The leafhoppers and froghoppers of Australia and New Zealand (Homoptera: Cicadelloidea and Cercopoidea). *Memoirs of the Australian Museum* 12: 1–347.
- Fabricius, J. C. 1775a. *Ryngota*. *Systema Entomologiae. Sisten insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus*. Korte, 816 pp., Flansburg and Leipzig, Germany.
- Ferrari, P. M. 1882a. *Cicadaria Agri Ligustici*. *Annali del Museo Civico de storia naturale di Genova* 18: 75–165.
- Fieber, F. X. 1885a. Description des Cicadines d'Europe des genres *Cicadula* et *Thamnotettix*. (Traduit de l'allemand sur le manuscrit original, par F. Reiber.) Avec des additions, par L. Lethierry. *Revue d'Entomologie* 4: 40–110.
- Fletcher, M. J. and M. C. Larivière. 2001 (and last update 2007). Identification keys and checklists for the leafhoppers, planthoppers and their relatives occurring in Australia and New Zealand (Hemiptera: Auchenorrhyncha). <http://www.agric.nsw.gov.au/Hort/ascu/leafhop/athysan.htm> [last accessed 6/18/07]
- Gillette, C. P. and C. F. Baker. 1895a. A preliminary list of the Hemiptera of Colorado. *Colorado Agricultural Experiment Station Bulletin* 31: 1–137.
- Giustina, W. della. 1989a. Homoptères Cicadellidae. Volume 3. *Complements aux ouvrages d'Henri Ribaut. Faune de France* 73: 1–350.
- Hamilton, K. G. A. 1975. A review of the Northern Hemisphere Aphrodina (Rhynchota: Homoptera: Cicadellidae), with special reference to the Nearctic fauna. *Canadian Entomologist* 107: 1009–1027.
- Haupt, H. 1927a. Homoptera Palestinae I. *Palestine Agricultural Experiment Station Bulletin* 8: 5–43.
- International Commission on Zoological Nomenclature. *International Code of Zoological Nomenclature*. 4th ed. 1999. International Trust for Zoological Nomenclature, London. xxix + 306 pp.

- Ishihara, T. 1961a. Homoptera of Southeast Asia collected by the Osaka City University Biological Expedition to Southeast Asia 1957–1958. *Nature and Life in Southeast Asia* 1: 225–257.
- Kirkaldy, G. W. 1906c. Leafhoppers and their natural enemies. Pt. IX, Leafhoppers. Hemiptera. Hawaiian Sugar Planters' Association, Division of Entomology Bulletin 1: 271–479.
- . 1907d. Leafhoppers supplement (Hemiptera). Hawaiian Sugar Planters' Association, Division of Entomology Bulletin 3: 1–186.
- Kirschbaum, C. L. 1868b. Die Cicadinen der gegend von Wiesbaden und Frankfurt A. M. nebst einer anzahl neuer oder schwer zu unterscheidender Arten aus anderen Gegenden Europa's Tabellarisch Beschrieben. *Jahrbuch des Vereins für Naturkunde im Herzogthum Nassau* 21–22: 1–202.
- Knight, W. J. 1987a. Leafhoppers of the grass-feeding genus *Balclutha* (Homoptera: Cicadellidae) in the Pacific Region. *Journal of Natural History* 21: 1173–1224.
- Kuoh, C. L. 1985b. Homoptera: Cicadelloidea, pp. 82–89. *In* *Organisms of Mt. Tuomuer area in Tianshan*. Xinjiang People Press, Urumqi, China.
- Kuoh, C. L. and Z. Lu. 1986a. A new leafhopper injurious to water caltrop (Homoptera: Cicadellidae). *Entomotaxonomia* 8(1–2): 121–123.
- Li, Z. Z. and R. Dai. 2003a. Description of four new species of the Deltocephalinae from Taiwan (Homoptera: Cicadellidae.) *Collection and Research* 16: 7–12.
- Lindberg, H. 1948b. On the insect fauna of Cyprus. Results of the expedition of 1939 by Harald Häkan and P. H. Lindberg. I. Heteroptera and Homoptera Cicadina der Insel Zypern. *Commentationes Biologicae* 10(7): 23–175.
- Linnavuori, R. 1959b. Revision of the Neotropical Deltocephalinae and some related subfamilies (Homoptera). *Suomalaisen Eläin- ja Kasvitieteellisen Seuran Vanamon Eläintieteellisiä Julkaisuja* 20: 1–370.
- . 1960a. Insects of Micronesia. Homoptera: Cicadellidae. Honolulu, Bishop Museum 6(5): 231–344.
- . 1960b. Cicadellidae (Homoptera, Auchenorrhyncha) of Fiji. *Acta Entomologica Fennica* 15: 1–71.
- . 1961a. Hemiptera (Homoptera): Cicadellidae, pp. 452–486. *In* Hanstrom, Brinck, and Rudebeck, eds. *South African Animal Life Volume 8*.
- . 1962a. Hemiptera of Israel. III. Suomalaisen Eläin- ja Kasvitieteellisen Seuran vanamon Eläintieteellisiä Julkaisuja 24(3): 1–108.
- . 1975a. Revision of the Cicadellidae (Homoptera) of the Ethiopian Region. III. Deltocephalinae, Hecalini. *Acta Zoologica Fennica* 143: 1–37.
- . 1975c. Homoptera: Cicadellidae (Supplement). *Insects of Micronesia* 6(9): 611–632.
- Linnavuori, R. E. and D. M. Delong. 1977c. The leafhoppers (Homoptera: Cicadellidae) known from Chile. *Brenesia* 12&13: 163–267.
- . 1977d. The genus *Acinopterus* (Homoptera: Cicadellidae) in Mexico and the Neotropical Region. *Entomological News* 88(9–10): 249–254.
- . 1978b. Neotropical leafhoppers of the *Bahita* group (Homoptera: Cicadellidae: Deltocephalinae). A contribution to the taxonomy. *Brenesia* 14&15: 109–169.
- . 1979a. New genera and species of the tribe Deltocephalini from South America. *Entomologica Scandinavica* 10: 43–53.
- Matsumura, S. 1902a. Monographie der Jassinen Japans. *Természetráji Füzetek* 25: 353–404.
- . 1908a. Neue Cicadinen aus Europa und Mittelmeergebiet. *Journal of the College of Science, Imperial University of Tokyo* 23(6): 1–46.
- . 1911b. Erster Beitrag zur Insekten-Fauna von Sachalin. *Journal of the College of Agriculture, Tohoku Imperial University, Sapporo* 4: 1–145.
- . 1914a. Die Jassinen und einige neue Acocephalinen Japans. *Journal of the College of Agriculture, Tohoku Imperial University, Sapporo* 5: 165–240.
- McKamey, S. H. 2003. Some new generic names in the Cicadellidae (Hemiptera: Deltocephalinae, Selenocephalinae). *Proceedings of the Entomological Society of Washington* 105(2): 447–451.
- . 2006. Further new genus-group names in the Cicadellidae (Hemiptera). *Proceedings of the Entomological Society of Washington* 108(3): 502–510.
- Melichar, L. 1903b. Homopteren-Fauna von Ceylon. 248 pp.
- . 1914b. Homopteren von Java, gesammelt von Herrn. Ewd. Jacobson. *Leydon Museum Notes* 36: 91–147.
- Merino, G. 1936a. Philippine Cicadellidae (Homoptera). *Philippine Journal of Science* 61: 307–400.
- Metcalf, Z. P. 1955a. New names in the Homoptera. *Journal of the Washington Academy of Sciences* 45: 262–267.
- . 1964a. General Catalogue of the Homoptera. Fascicle VI. Cicadelloidea. *Bibliography of the Cicadelloidea (Homoptera: Auchenorrhyncha)*. United States Department of Agriculture, Agriculture Research Service, Washington, D.C. 349 pp.

- . 1967a. General Catalogue of the Homoptera. Fascicle VI. Cicadelloidea. Part 10. Section I. Euscelidae. U.S. Department of Agriculture, Agriculture Research Service, Washington, D.C. 1077 pp.
- . 1967b. General Catalogue of the Homoptera. Fascicle VI. Cicadelloidea. Part 10. Section II. Euscelidae. U.S. Department of Agriculture, Agriculture Research Service, Washington, D.C. pp. 1078–2074.
- . 1967c. General Catalogue of the Homoptera. Fascicle VI. Cicadelloidea. Part 10. Section III. Euscelidae. U.S. Department of Agriculture, Agriculture Research Service, Washington, D.C. pp. 2075–2695.
- Morrison, W. P. 1973a. A revision of the Hecalinae (Homoptera: Cicadellidae) of the Oriental Region. *Pacific Insects* 15(3–4): 379–438.
- Nast, J. 1972a. Palearctic Auchenorrhyncha (Homoptera): An annotated check list. Institute of Zoology, Polish Academy of Sciences, Polish Scientific Publisher, Warsaw. 550 pp.
- Naudé, T. J. 1926a. Cicadellidae of South Africa, a taxonomic and faunistic study. Union of South Africa Department of Agriculture and Forestry, *Entomology Memoirs* 4: 1–106.
- Oman, P. W. 1949a. The Nearctic leafhoppers (Homoptera: Cicadellidae). A generic classification and check list. *Memoirs of the Entomological Society of Washington* No. 3, 253 pp.
- Oman, P. W., W. J. Knight, and M. W. Nielson. 1990. Leafhoppers (Cicadellidae): A Bibliography, Generic Check-list and Index to the World Literature 1956–1985. CAB International Institute of Entomology, Wallingford, UK. [iv] + 368 pp.
- Osborn, H. 1924c. Neotropical Homoptera of the Carnegie Museum. Part 4. Report upon the collection in the subfamily Jassinae, with descriptions of new species. *Annals of the Carnegie Museum* 15: 397–462.
- . 1926c. Faunistic and ecologic notes on Cuban Homoptera. *Annals of the Entomological Society of America* 19: 335–366.
- Provancher, L. 1872c. Description de plusieurs Hémiptères nouveaux. *Naturaliste Canadien* 4: 376–379.
- Puton, A. 1898a. Hémiptères nouveaux. *Revue d'Entomologie* 17: 273–274.
- Ross, H. H. 1968a. The evolution and dispersal of the grassland leafhopper genus *Exitianus*, with keys to the Old World species (Cicadellidae-Hemiptera). *Bulletin of the British Museum (Natural History) Entomology* 22(1): 1–30.
- Scott, J. 1876d. Descriptions of three new species of European Hemiptera-Homoptera. *Entomologist's Monthly Magazine* 13: 83–85.
- Seven, S. 1997. Pasifik Adalarından bir Cicadellid cinsinin nomenklaturu uzerine notlar (Homoptera). Centre for Entomological Studies Miscellaneous Papers 35–36: 6–7. [Publication not seen; source: *Zoological Record* v. 133–135 1997–1999.]
- Shen, L. and W. Dai. 2002. A new species of the genus *Neurotettix* Matsumura (Homoptera: Cicadellidae: Deltocephalinae). *Entomotaxonomia* 24(2): 89–92.
- Theron, J. G. 1970b. Redescription of ten of Cogan's species of South African Cicadelloidea (Hemiptera). *Journal of the Entomological Society of Southern Africa* 33(2): 303–323.
- Uhler, P. R. 1880a. Remarks on a new form of Jassid. *American Entomologist* 3: 72–73.
- Van Duzee, E. P. 1894f. Descriptions of some new North American homopterous insects. *Bulletin of the Buffalo Society of Natural Sciences* 5: 205–216.
- . 1910a. A revision of the American species of *Platymetopus*. *Annals of the Entomological Society of America* 3: 214–231.
- Villiers, A. 1956a. Contribution a l'étude du peuplement de la Mauritanie: Description de nouveaux Hemipteres. *Bulletin de l'Institut Français d'Afrique Noire (Serie A)* 18: 834–842.
- Wang, L. M. and Z. Z. Li. 2004a. Three new species of the genus *Scaphoideus* (Homoptera: Cicadellidae: Euscelinae) from Yunnan. *Entomotaxonomia* 26(1): 15–18.
- Webb, M. D. and J. Vilbaste. 1994a. Review of the leafhopper genus *Balchutha* Kirkaldy in the Oriental Region (Insecta, Homoptera, Auchenorrhyncha). *Entomologische Abhandlungen* 56: 55–87.
- Wolcott, G. N. 1923b. *Insectae Portoricensis*. A preliminary annotated check-list of the insects of Porto Rico, with descriptions of some new species. *Puerto Rico University Journal of Agriculture* 7(1): 1–313.
- Zetterstedt, J. W. 1828a. Ordo III. Hemiptera. *Fauna Insectorum Lapponica* 1: 1–563.